Claims:

1. A process for preparing boehmitic aluminas by hydrolysis of aluminium alcoholates in aqueous, alkaline solution, optionally followed by aging, characterised in that
   - the hydrolysis is carried out at pH values above 8.5 and
   - the hydrolysis and/or the aging of the mixture resulting from the hydrolysis is carried out in the presence of substituted carboxylic acids, the salts thereof or their derivatives which during hydrolysis and/or the hydrothermal aging are at least partially converted into the free carboxylic acid or the dissociated form thereof, wherein at least one of the additional substituents is selected from the group consisting of carboxy-, hydroxy-, oxo- and amino groups.

2. The process according to claim 1, characterised in that the substituted carboxylic acid, their derivatives or the salt thereof is added in quantities of from 0.1 to 0.5 wt.%, preferably 0.2 to 0.4 wt.%, referring to the total mass of aqueous premix for hydrolysis and/or the aging composition and calculated as substituted carboxylic acid.

3. The process according to any one of the preceding claims, characterised in that the substituted carboxylic acid, their derivatives or salt thereof are selected from the group comprised of di- or tricarboxylic acids, hydroxycarboxylic acids, hydroxydicarboxylic acids, hydroxytricarboxylic acids, dihydroxydicarboxylic acids, oxocarboxylic acids and amino acids.

4. The process according to any one of the preceding claims, characterised in that the hydrolysis is carried out at 50 to 95°C, preferably above 60 to 95°C.

5. The process according to any one of the preceding claims, characterised in that the boehmitic aluminas are subsequently subjected to aging.

6. The process according to claim 5, characterised in that the aging step is carried out at temperatures ranging from 80°C to 250°C, preferably 130°C to 220°C, most preferably 205°C to 215°C for at least 1 hour, preferably at least 2 hours.

7. The process according to claim 5 or 6, characterised in that the aging step is carried out in an aqueous environment with a solid matter concentration (as Al_2O_3) at the beginning of the aging step ranging from 2 to 17 wt.%, preferably 5 to 10 wt.%, referring to the total mass of composition subjected to aging.

8. Boehmitic aluminas which can be manufactured by the process according to any one of the preceding claims, preferably according to claim 5 to 7, and which convert to the α-phase only at temperatures of above 1350°C.

9. The boehmitic aluminas according to claim 8, characterised in that the aluminas have a lamellar (plate type) or needle shaped (acicular) crystal structure, preferably an acicular one, depending on the carboxylic acid used.

10. The boehmitic aluminas according to claim 8 or 9 or the alumina prepared therefrom by calcination, characterised in that before and after calcination the boehmitic aluminas or the alumina are dispersible even at neutral pH values in aqueous or organic media, particularly C_1- to C_3-alcohols, in quantities above 1 wt.%, preferably above 7 wt.%, most preferably above 10 wt.%, calculated as Al_2O_3 and referring to the total composition.

11. An alumina prepared according to any one of claims 1 to 7 followed by calcination, characterised in that the alumina when treated with temperatures of above 1200°C remains to have a pore volume of above 0.5 ml/g, based on pore radii from 2 to 100 nm, and a surface area above 20 m^2/g, measured in accordance with DIN 66131.

12. An alumina prepared according to any one of claims 1 to 7 followed by calcination, characterised in that calcination is carried out at above 450 °C and the alumina has a particle size ranging from 10 to 50 nm in aqueous suspension or dispersion.

13. Use of the aluminas obtained by calcination of the boehmitic aluminas according to any one of claims 1 to 7 as catalyst carriers, particularly for motor car exhaust gas catalysis.
